

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF OHIO  
EASTERN DIVISION**

**CARLO M. CROCE**

**Plaintiff,**

**vs.**

**DAVID A. SANDERS**

**Defendant.**

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**Case No. 2:17-cv-00338**

**Judge James L. Graham**

**Magistrate Judge Preston Deavers**

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**Exhibit 1 to Defendant's Appendix in Support of  
Motion for Summary Judgment – Excerpts of  
Deposition of Carlo Croce**

Carlo M. Croce, MD

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IN THE UNITED STATE DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF OHIO  
EASTERN DIVISION

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Case No. 2:17-CV-00338  
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Carlo M. Croce,  
Plaintiff,  
vs.

David A. Sanders,  
Defendant.

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Deposition of: CARLO M. CROCE, MD

Date and Time: Wednesday, March 27, 2019  
8:53 a.m.

Place: James E. Arnold & Associates  
115 West Main Street  
Suite 400  
Columbus, Ohio

Reporter: Maria DiPaolo Jones, RDR, CRR  
Notary Public - State of Ohio  
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3 CARLO M. CROCE, MD PAGE  
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DEFENDANT'S EXHIBITS

NUMBER	DESCRIPTION	IDENTIFIED
1	Second Amended Complaint	11
2	12/5/2013 emails Bates stamped	51
3	CROCE(S)001632 - 1633, CONFIDENTIAL	
9	9/2014 emails Bates stamped	68
10	CROCE(S)002499 - 2500, CONFIDENTIAL	
4	11/5/2018 correction in Oncogene	77
5	9/2016 emails Bates stamped	80
13	CROCE(S)002982 - 2984, CONFIDENTIAL	
14	3/19/2019 PLOS ONE article	83
15	11/23/2016 letter from Glanz	95
16	11/2016 emails, with attachment, Bates stamped CROCE(S)004259 - 4264, CONFIDENTIAL	97
17	12/29/2016 email from Melino, with attachment, Bates stamped	98
18	CROCE(S)001163 - 1164, CONFIDENTIAL	
19	1/23/2017 emails Bates stamped	102
20	CROCE(S)004153, CONFIDENTIAL	
11	1/2/2017 email from Green Bates stamped CROCE(S)001022, CONFIDENTIAL	105
22	The New York Times article	109
23	3/2017 emails Bates stamped	112
24	CROCE(S)004250, CONFIDENTIAL	

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ALSO PRESENT:

Dr. David A. Sanders

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NUMBER	DESCRIPTION	IDENTIFIED
14	1/25/2017 letter from Hill, with attachments, Bates stamped	114
4	CROCE(S)003224 - 3246, CONFIDENTIAL	
5	11/1/2007 emails, with attachment, Bates stamped CROCE(S)000456 - 0458, CONFIDENTIAL	155
16	8/2016 and 9/2016 emails Bates stamped CROCE(S)002941 - 2943, CONFIDENTIAL	170
17	12/29/2016 emails Bates stamped CROCE(S)003918 - 3919, CONFIDENTIAL	176
18	11/10/2015 letter from Croce Bates stamped CROCE(S)002696, CONFIDENTIAL	180
19	12/2012 and 5/6/2013 emails, with attachment, Bates stamped CROCE(S)002672 - 2677, CONFIDENTIAL	184
20	6/2014 emails Bates stamped CROCE(S)001700 - 1703, CONFIDENTIAL	191
21	2016 and 2014 emails Bates stamped CROCE(S)001277 - 1283, CONFIDENTIAL	200
22	12/12/2016 letter from Croce Bates stamped CROCE(S)004075 - 4076, CONFIDENTIAL	205
23	1/2017 emails Bates stamped CROCE(S)004177 - 4179, CONFIDENTIAL	207
24	2/2/2017 letter from Hill Bates stamped CROCE(S)003266 - 3272, CONFIDENTIAL	209
25	12/7/2018 article	217

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<p>1 CARLO M. CROCE, MD, 2 being by me first duly sworn, as hereinafter 3 certified, deposes and says as follows: 4 CROSS-EXAMINATION 5 BY MR. NOLAN: 6 Q. Dr. Croce, good morning. I'm Bill Nolan 7 with the law firm of Barnes &amp; Thornburg. This is my 8 partner, Kara Kapke. We represent Dr. Sanders in the 9 case you filed in federal court against Dr. Sanders. 10 Can you please state your full name for 11 the record. 12 A. Carlo Maria Croce. 13 Q. Thank you. 14 And, Dr. Croce, have you ever been deposed 15 before? 16 A. Yes. 17 Q. How many times? 18 A. Five or six. 19 Q. When most recently? 20 A. For Genentech, a pharmaceutical company. 21 I provide my expertise. 22 MR. ARNOLD: When? 23 Q. Yeah, just when was the last time you were 24 deposed for any reason? 25 A. Three, four years ago.</p>	<p>1 Q. Okay. A little bit deaf? 2 A. No. A little bit deaf, yes. 3 Q. Okay. 4 A. I don't hear very well where there is 5 noise, but I can hear you very well. 6 Q. Very good. So I'm glad you mentioned 7 that. So if you don't hear me, will you let me know? 8 A. Of course. 9 Q. And if you don't understand for any 10 reason, will you let me know? 11 A. Of course. 12 Q. English is not your first language? 13 A. No. Italian is my first language, but I 14 can understand English. 15 Q. Okay. You consider yourself fluent in 16 English? 17 A. I consider myself a little fluent. 18 Q. Dr. Croce, do you feel fine today? 19 A. I have a little bit of a high blood 20 pressure, but otherwise I am okay. 21 Q. Is there any reason, illness, fatigue, 22 medication, that you would not have your best 23 recollection today? 24 A. I don't think so. 25 Q. Okay. Very good. Thank you.</p>
Page 6	Page 8
<p>1 Q. Okay. So you're familiar with the 2 process. 3 A. Yes. At least I think so. 4 Q. Right. Let me just -- so this will all be 5 very familiar to you I'm sure, but let's just go over 6 a few understandings. First of all, it's not an 7 endurance contest, if you need a break, will you let 8 me know? 9 A. Uh-huh. 10 Q. And which leads me to my second one, which 11 is so the court reporter can have a good record 12 you'll need to say "yes" or "no" instead of a shake 13 of the head or "uh-huh," "huh-uh." Is that okay? 14 A. Of course. 15 Q. Very natural to get reminded of that every 16 now and then so I will do that as politely as I can 17 from time to time probably. 18 I'll certainly ask that you let me finish 19 my questions. At the same time, I want to make sure 20 I let you finish your answers so will you let me know 21 if I inadvertently cut you off so you can finish? 22 A. Okay. 23 Q. Okay. And also will you let me know if 24 you don't understand a question of mine? 25 A. I'm a little bit deaf so speak loud.</p>	<p>1 Dr. Croce, just a few sort of basics about 2 yourself. What is your current address? 3 A. Is 2140 Cambridge Boulevard here in 4 Columbus, Ohio. In Upper Arlington. 5 Q. Okay. And how long have you lived there? 6 A. Since -- I been here about 14 years. 7 Q. Do you currently live with anybody else at 8 that address? 9 A. No, but I have a companion who has a 10 different address so I spend some time with her. 11 Q. All right. Are you currently married? 12 A. No. I never been married. 13 Q. And do you have any other residences 14 besides the Upper Arlington residence? 15 A. Yeah, in Philadelphia, 1829 Delancey 16 Place. 17 Q. Any others? 18 A. Not that I know. 19 Q. Okay. You'd probably know. 20 You don't have a residence in Italy? 21 A. I did, but I don't have it anymore. 22 Q. All right. If you could just review your 23 degrees for me, where you got them, when you got 24 them, what they are. 25 A. I am an MD. I got my degree in 1969 at</p>

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<p>1 University of Rome that is now called La Sapienza.</p> <p>2 Q. Okay.</p> <p>3 A. I have also an online degree in medicine</p> <p>4 from the University of Uppsala in Sweden.</p> <p>5 Q. When did you receive that?</p> <p>6 A. About 25 years ago, something like that.</p> <p>7 Q. All right. Any other honorary degrees?</p> <p>8 A. No.</p> <p>9 Q. And where did you receive your</p> <p>10 undergraduate degree?</p> <p>11 A. We have a different system over in Italy.</p> <p>12 We go from high school to university, so we don't</p> <p>13 have the college period, like most of Europe.</p> <p>14 Q. Okay. It wouldn't be like a bachelor's</p> <p>15 and then an MD --</p> <p>16 A. No.</p> <p>17 Q. -- as you might in the United States.</p> <p>18 A. No. I go from high school to medical</p> <p>19 school.</p> <p>20 Q. Very good.</p> <p>21 All right. So how old were you when you</p> <p>22 graduated from medical school?</p> <p>23 A. I was six year in medical school, I</p> <p>24 started when I was 18 years old, 24.</p> <p>25 Q. All right. And when did you move to the</p>	<p>1 Q. Dr. Croce, I'm going to hand you what I'm</p> <p>2 marking as Exhibit 1.</p> <p>3 MR. NOLAN: You probably have that.</p> <p>4 MR. ARNOLD: I've seen it before.</p> <p>5 Q. Dr. Croce, just for the record we'll make</p> <p>6 this Defendant's Exhibit 1. That's just some</p> <p>7 administrative stuff between the lawyers. Do you</p> <p>8 recognize Defendant's Exhibit 1?</p> <p>9 A. Yeah, I see it.</p> <p>10 Q. Have you seen it before?</p> <p>11 A. I seen it once I think.</p> <p>12 Q. All right. And I will just represent to</p> <p>13 you and note for the record that Exhibit 1 refers to</p> <p>14 some exhibits which are not actually attached to what</p> <p>15 I've handed you as Exhibit 1; we'll probably look at</p> <p>16 those later. Are you able to tell me what Exhibit 1</p> <p>17 is?</p> <p>18 A. It said that is the second amended</p> <p>19 complaint from me against the defendant, David A.</p> <p>20 Sanders.</p> <p>21 Q. All right. Go to the last page of Exhibit</p> <p>22 1.</p> <p>23 A. Last page? Yes.</p> <p>24 Q. You understand Exhibit 1 was filed on your</p> <p>25 behalf by --</p>
Page 10	Page 12
<p>1 United States?</p> <p>2 A. 1970, June the 3rd.</p> <p>3 Q. And for what purpose?</p> <p>4 A. I got -- I won a fellowship from a</p> <p>5 European society to work in United States and I ended</p> <p>6 up in Philadelphia.</p> <p>7 Q. Have you lived in the -- has the United</p> <p>8 States been your primary residence since 1970?</p> <p>9 A. Correct.</p> <p>10 Q. And how long did you live in Philadelphia?</p> <p>11 A. Oh, a long time. Until I came here.</p> <p>12 Until the end of 2004.</p> <p>13 Q. In 2004 you moved to Columbus?</p> <p>14 A. Yes. In October or November.</p> <p>15 Q. Okay. And why did you move to Columbus?</p> <p>16 A. Because they offered me a good job.</p> <p>17 Q. "They" being The Ohio State University?</p> <p>18 A. Yeah.</p> <p>19 Q. And you're still employed by Ohio State?</p> <p>20 A. Yeah.</p> <p>21 Q. Dr. Croce, I'm going to --</p> <p>22 MR. NOLAN: If we can go off the record</p> <p>23 just a second.</p> <p>24 (Discussion off the record.)</p> <p>25 MR. NOLAN: Go back on the record.</p>	<p>1 A. By Hill.</p> <p>2 Q. -- your prior law firm?</p> <p>3 A. Correct.</p> <p>4 Q. Do you recall, did you review Exhibit 1</p> <p>5 before it was filed?</p> <p>6 A. I'm sure I did. I'm sure I did. Tom Hill</p> <p>7 showed that to me.</p> <p>8 Q. All right. And I would just like to sort</p> <p>9 of use Exhibit 1 as a little bit of a road map for</p> <p>10 questions for a while. So, first of all, before we</p> <p>11 look at some specifics in the document, just in your</p> <p>12 own words why did you file a lawsuit against</p> <p>13 Dr. Sanders?</p> <p>14 A. Because I was accused of doing things that</p> <p>15 I never did, and my reputation has been assaulted</p> <p>16 and -- by a lot of lies, and so for a scientist a</p> <p>17 reputation is enormously important and I felt</p> <p>18 extremely bad that my reputation was assaulted when I</p> <p>19 did all the time all my jobs.</p> <p>20 I carry out science for a long time, very</p> <p>21 successfully, and all my publication have been</p> <p>22 confirmed. I am one of the most cited scientists in</p> <p>23 the entire world, and do you know this so-called H</p> <p>24 index, which is a measurement of impact, I have one</p> <p>25 of the greatest impacts in the world. I have the</p>

<p style="text-align: right;">Page 13</p> <p>1 highest H index of any Italian scientist ever. Okay?</p> <p>2 Which indicate that my science has been very</p> <p>3 successful and, in fact, it has.</p> <p>4 I receive a lot of prizes and recognition,</p> <p>5 and I always believe in integrity of science and so I</p> <p>6 felt that this was an attack on my reputation and I</p> <p>7 think on science because the way that's been done has</p> <p>8 been very disgraceful.</p> <p>9 Did I answer your question?</p> <p>10 Q. You did. Thank you.</p> <p>11 And when you say, you say the way "this"</p> <p>12 has been done was very disgraceful. When you say</p> <p>13 "this," what do you mean by "this"?</p> <p>14 A. The accusation. The accusation by The</p> <p>15 New York Times and Dr. Sanders.</p> <p>16 Q. I just want to step back a minute. Fair</p> <p>17 to refer to you as a cancer researcher?</p> <p>18 A. I would say that's correct.</p> <p>19 Q. That's a good --</p> <p>20 A. I am a geneticist who spend most his time</p> <p>21 in cancer genetics.</p> <p>22 Q. When did you first become a geneticist</p> <p>23 spending most of your time in cancer genetics?</p> <p>24 A. So when I was -- can I -- I would not be</p> <p>25 that brief --</p>	<p style="text-align: right;">Page 15</p> <p>1 Those experiment has the result showing</p> <p>2 that the specific gene is genetically altered and</p> <p>3 cause cancer for the first demonstration of the</p> <p>4 involvement of the specific human gene in cancer</p> <p>5 biology, you know.</p> <p>6 What we call today a targeted therapy, you</p> <p>7 know everybody talks about targeted therapy and</p> <p>8 cancer, depend essentially on the discovery that you</p> <p>9 have a driver, a driver gene that cause cancer.</p> <p>10 Naturally, if you inhibit the cancer gene, you might</p> <p>11 be able to have a huge impact on therapy. So that</p> <p>12 was my first big success, and I got many prizes with</p> <p>13 that including the Mott, General Motors, one of the</p> <p>14 most -- of the biggest international prizes.</p> <p>15 A few years after -- so that was I believe</p> <p>16 '82. In '84 I made one of the most outstanding</p> <p>17 discoveries that has a huge impact overall now, I</p> <p>18 discover, again by studying chromosomal translocation</p> <p>19 in cancer, I discovered a gene that I named BCL2 for</p> <p>20 B-cell leukemia/lymphoma 2. Okay?</p> <p>21 The gene is phenomenally interesting</p> <p>22 because it inhibit the process called "apoptosis."</p> <p>23 Before people thought that all the cancer gene</p> <p>24 affected only proliferation. This affect survival.</p> <p>25 So I discovered this gene that worked in a</p>
<p style="text-align: right;">Page 14</p> <p>1 Q. That's okay.</p> <p>2 A. -- so if we start from Adam and Eve. When</p> <p>3 I was in medical school, I wanted to become a</p> <p>4 neurobiologist. Went to medical school and I started</p> <p>5 to be interested really in medicine and particularly</p> <p>6 I was fascinated by the beginning of molecular</p> <p>7 biology.</p> <p>8 And it turned out that I develop a great</p> <p>9 interest in cancer biology generally and I was very</p> <p>10 like it because all my life I work in cancer biology</p> <p>11 and genetics. And the thing I love the most is</p> <p>12 discovery, you know? I think I am completely good at</p> <p>13 discovering important things. That's all.</p> <p>14 Q. All right. That wasn't so long. Thank</p> <p>15 you for that.</p> <p>16 And do you, I mean, do you think you've</p> <p>17 had an impact on treating cancer?</p> <p>18 A. Oh, of course. I think I have a huge</p> <p>19 impact. Some of my work is in medical textbook. I</p> <p>20 changed the way of thinking in several area of cancer</p> <p>21 research. I give you an example. The work, probably</p> <p>22 my first great success was a discovery of how</p> <p>23 chromosomal translocation cause cancer, the Burkitt</p> <p>24 lymphoma, that changed the way we think about cancer,</p> <p>25 just to give you an example.</p>	<p style="text-align: right;">Page 16</p> <p>1 completely different way and it was found to be</p> <p>2 involved in follicular lymphoma, and later on it was</p> <p>3 found to be involved in chronic lymphocytic leukemia.</p> <p>4 And then I used a similar approach to discover many</p> <p>5 cancer genes. I would be too long to describe all of</p> <p>6 them. Okay?</p> <p>7 And so I discovered several cancer gene</p> <p>8 and I was interested mainly in tumor initiation.</p> <p>9 Q. Tumor?</p> <p>10 A. Initiation. How the cancer start.</p> <p>11 Q. I see.</p> <p>12 A. Okay? Because it became very clear the</p> <p>13 cancer is the result of multiple genetic alteration</p> <p>14 but it has to start somewhere. And the gene that are</p> <p>15 changed at the beginning are very critical, very</p> <p>16 likely during all process of carcinogen- -- I'm</p> <p>17 sorry.</p> <p>18 Q. That's all right.</p> <p>19 (Interruption.)</p> <p>20 A. So we discover many genes which are</p> <p>21 involved in initiation, or the early stages of</p> <p>22 carcinogenesis. Most of my early work is in leukemia</p> <p>23 and lymphoma, and in fact I am considered like the</p> <p>24 Pope of the genetics of leukemias and lymphomas in</p> <p>25 the -- I understand the solid tumor.</p>

<p style="text-align: right;">Page 17</p> <p>1 Now, so I discover many other gene and the 2 mechanism involved in carcinogenesis and then, more 3 recently, I don't know if it was ability or luck, 4 probably a combination of both, I came to another 5 phenomenal discovery which is having a huge impact. 6 I discovered that in the most common human leukemia, 7 which is called chronic lymphocytic leukemia, which 8 is the most common adult leukemia, there was a loss 9 of two microRNA genes, which are close to each other. 10 Okay?</p> <p>11 And there was this phenomenal discovery 12 because before this discovery people thought that all 13 the genes which are involved in cancer pathogenesis 14 are genes that they include four proteins. Okay?</p> <p>15 So everybody knew that this so-called 16 oncogene, gene that has to be activated in order to 17 be involving cancer, or tumor suppressor genes in 18 order to be inhibited, they shut off the others and 19 are protein-coding genes. Okay?</p> <p>20 My discovery beginning in 2002 showed that 21 in fact genetic alteration in the non-coding genome, 22 in gene that do not include the four protein, can be 23 involved in cancer pathogenesis. Okay? That was 24 outstanding discovery. Nobody thought that gene that 25 do not include four protein would be involved in</p>	<p style="text-align: right;">Page 19</p> <p>1 lost, BCL2 is expressed at a high level and that is a 2 driver for molecular transformation. Okay?</p> <p>3 So after I discovered this gene and a lot 4 of, I mean, this is one of the most studied genes now 5 in the world, pharmaceutical companies started to be 6 interested in developing inhibitors of this gene. 7 Consider the concept of a driver, okay, the 8 expression of the gene that drive, the expression of 9 malignant gene. So if you have a molecule that 10 inhibit the driver, that might have a huge impact in 11 therapy. In therapeutics.</p> <p>12 So we all thought that that would be the 13 case, but to make a drug takes millions and millions 14 of dollars. They claim that to make a drug approved 15 by FDA cost a billion dollars. Okay?</p> <p>16 So at the beginning a company called 17 Abbott in Chicago had a scientist called Fesik who 18 believed that he could make small molecule to inhibit 19 protein-protein interaction, and everybody at that 20 time thought it would be impossible to make small 21 molecules that inhibit protein-protein interaction. 22 Instead, Steve Fesik believed that was 23 possible and by determining the three-dimensional 24 structure of protein known as BCL2 family, he was 25 able to design his small molecule that inhibit BCL2.</p>
<p style="text-align: right;">Page 18</p> <p>1 anything. Okay?</p> <p>2 In fact, that is strange because we know 3 that the coding genome, the genome that include four 4 protein, represent something like 2 percent of the 5 human genome. So if you look at your DNA and my DNA, 6 okay, 98 percent of the genome is non-coding. Why? 7 Okay. So it became obvious after this discovery that 8 in fact the non-coding genome was are very important 9 for a lot of mechanism.</p> <p>10 So that was I think a discovery that 11 changed the field, not only of oncology, it changed 12 medicine. Yeah?</p> <p>13 And then more recently, and that was when 14 I was here at OSU, we made another discovery that 15 makes things very clear. We discovered that this 16 microRNA that are deleted in chronic lymphocytic 17 leukemia, target the gene that I discovered in 1984, 18 BCL2. Okay?</p> <p>19 So microRNA are negative regulator gene 20 expression, they are very small RNA molecule, and 21 they are negative regulators. So the expression of 22 the microRNA shut off the expression of the 23 target genes. Okay? So the function of this 24 microRNA discovered to keep certain gene in check 25 including BCL2. When the negative regulator are</p>	<p style="text-align: right;">Page 20</p> <p>1 But there is a caveat, and the caveat is that BCL2 2 has other family members that do different things, 3 but which are structurally related.</p> <p>4 So the first drug that Abbott developed 5 against BCL2, which affected other BCL2 family 6 members that were discovered after BCL2, in 7 particular it inhibited a product called BclX Long, 8 which is critical for the survival of platelets.</p> <p>9 So when Abbott gave this drug to patient, 10 it became clear that the drug kill also the 11 platelets, all the platelets, so it could not be 12 used. So they, to make a long story short, after 13 several years Abbott developed a small molecule that 14 is specific only for BCL2.</p> <p>15 Q. Okay.</p> <p>16 A. The approval was I believe in April 2016. 17 So the gap between discovery of the target and 18 discovery of the -- and the approval by FDA was 32 19 years. And all my patent on BCL2 were expired 20 because I developed the patent a long time ago.</p> <p>21 So Abbott now has a drug that is called 22 venetoclax, or ABT-199. This drug is phenomenal. 23 Okay? This drug is absolutely phenomenal. And --</p> <p>24 MR. ARNOLD: Stop there. Let's sprinkle a 25 question in every now and then. Okay?</p>



<p style="text-align: right;">Page 29</p> <p>1 through to yourself if you would.</p> <p>2 A. Six? What do you want to know about 6?</p> <p>3 Q. Just go ahead and read through 6 and 7 to</p> <p>4 yourself and let me know when you're done.</p> <p>5 A. All right. Looks correct.</p> <p>6 They're fine.</p> <p>7 Q. Okay. You see across the very top of</p> <p>8 every page of Defendant's Exhibit 1 is sort of a</p> <p>9 stamp that says, "Filed: 5/5/18"? Do you see that?</p> <p>10 A. This one?</p> <p>11 Q. Yes.</p> <p>12 A. Yes.</p> <p>13 Q. I'll just represent to you that the court</p> <p>14 puts that on there. So since -- and I apologize,</p> <p>15 this is 4/21/2018. I was looking at something else.</p> <p>16 Across the top of the page it says "4/21/2018." I</p> <p>17 misspoke.</p> <p>18 A. Yeah. 4/21/2018.</p> <p>19 Q. So I'm just going to use that date as a</p> <p>20 reference point.</p> <p>21 A. Okay.</p> <p>22 Q. Have you received awards since April 21,</p> <p>23 2018?</p> <p>24 A. I don't know.</p> <p>25 Q. Okay. Isn't there, and I may not get this</p>	<p style="text-align: right;">Page 31</p> <p>1 Q. I see.</p> <p>2 Look at Paragraph 10 of Defendant's</p> <p>3 Exhibit 1 on page 5, please, again just read that to</p> <p>4 yourself and let me know when you're done.</p> <p>5 A. From the top?</p> <p>6 Q. Yes, please.</p> <p>7 A. Yes, I read it, 10 and 11.</p> <p>8 Q. You see there are a couple of things in</p> <p>9 quotation marks in Paragraph 10?</p> <p>10 A. Yes.</p> <p>11 Q. Do you know what scientist made those</p> <p>12 statements about you?</p> <p>13 A. Probably a lot of scientists made that</p> <p>14 statement.</p> <p>15 Q. Okay. You don't recognize those</p> <p>16 particular quotes from something specific?</p> <p>17 A. They could be --</p> <p>18 MR. ARNOLD: Well, you don't need to</p> <p>19 guess. If you know who it is, tell him.</p> <p>20 THE WITNESS: Huh?</p> <p>21 MR. ARNOLD: If you know who it is who</p> <p>22 said that, then tell him. If you don't know --</p> <p>23 A. Now I don't remember.</p> <p>24 Q. That's okay.</p> <p>25 Dr. Croce, I'm just looking at a couple --</p>
<p style="text-align: right;">Page 30</p> <p>1 right, a Dan David Prize or something?</p> <p>2 A. Yeah. I got it about a year ago, yes.</p> <p>3 Dan David Prize. One of the most prestigious prize</p> <p>4 in the world.</p> <p>5 Q. Tell me what that prize means. What's</p> <p>6 that about?</p> <p>7 They give this prize for thing that they</p> <p>8 believe are very important in three areas, one is</p> <p>9 medicine and biology, and for every year would</p> <p>10 essentially give it to targeted therapy and how on</p> <p>11 the base of the target, gene target you develop</p> <p>12 therapy. And I shared this prize. That prize was a</p> <p>13 million dollars.</p> <p>14 I shared this prize with two outstanding</p> <p>15 people, one was Bert Vogelstein, one of the people</p> <p>16 with major impact in cancer genetics, and the other</p> <p>17 one Mary-Claire King, the lady who discovered BRCA1,</p> <p>18 the gene which is involved in breast cancer</p> <p>19 pathogenesis. So we shared this prize. It was given</p> <p>20 in Jerusalem I believe in March of last year.</p> <p>21 Q. Given where?</p> <p>22 A. Jerusalem.</p> <p>23 Q. Okay.</p> <p>24 A. In Tel Aviv. In Tel Aviv. And I also</p> <p>25 went to Jerusalem, but the ceremony was in Tel-Aviv.</p>	<p style="text-align: right;">Page 32</p> <p>1 I looked up your bios of course, you also received</p> <p>2 something, I may not say this right, the Cavaliere di</p> <p>3 Gran Croce?</p> <p>4 A. Is the title that the president of the</p> <p>5 Republic give to me.</p> <p>6 Q. What Republic?</p> <p>7 A. Italian.</p> <p>8 Q. The president of Italy.</p> <p>9 A. Ciampi. I have a diploma in my office and</p> <p>10 also I have also a cross and a --</p> <p>11 Q. All right. Is that prestigious in Italy?</p> <p>12 A. I suppose. I don't care that much about</p> <p>13 those kind of honors, but was nice because I like</p> <p>14 Ciampi, the former president of Italy.</p> <p>15 Q. I see.</p> <p>16 A. It was a nice ceremony.</p> <p>17 Q. I see. When was that?</p> <p>18 A. God knows. In the '90s I think.</p> <p>19 Q. Been a while ago. Okay.</p> <p>20 A. It is like to be knighted, but not by the</p> <p>21 Queen of England, but in this case by the Italian</p> <p>22 president.</p> <p>23 Q. All right.</p> <p>24 A. And there are various degrees.</p> <p>25 Q. I see. Okay.</p>

<p style="text-align: right;">Page 45</p> <p>1 lab work.</p> <p>2 Q. Tell me, if you would, and it's referenced</p> <p>3 briefly in the complaint, what is a review paper?</p> <p>4 A. The review paper is when some journal asks</p> <p>5 you to write -- which in my case I never ask to write</p> <p>6 the review. In general, I am asked to write reviews.</p> <p>7 Okay? So a journal know that you are an expert in a</p> <p>8 certain field and, let's say microRNA, okay,</p> <p>9 "Dr. Croce, can you write an article on microRNA or</p> <p>10 microRNA and this disease?" Okay?</p> <p>11 So I hate to write review article because</p> <p>12 I care about one thing, which is discovery, you know?</p> <p>13 That's what I love. Okay? So I hate to write review</p> <p>14 article. So if The New England Journal of Medicine</p> <p>15 ask me to write a review article, I say "Yes," and I</p> <p>16 write it myself. Okay? Because the huge impact, I</p> <p>17 have to be extremely -- put every idea I think are</p> <p>18 important to be cited and so on. So in those -- in</p> <p>19 that case I write the article myself, but there are</p> <p>20 very few of those.</p> <p>21 In general, when somebody asks me to write</p> <p>22 a review article, I -- since the productivity of my</p> <p>23 people is important to me, and also I want them to</p> <p>24 mature and they have to be able to write the review</p> <p>25 and to think in the way to write the review, so I ask</p>	<p style="text-align: right;">Page 47</p> <p>1 may make sense and say what the lab say, you know?</p> <p>2 Q. And in that case would your name go on the</p> <p>3 review as well as the postdoc?</p> <p>4 A. Of course.</p> <p>5 Q. Both names.</p> <p>6 A. Because is essentially the postdoc say</p> <p>7 what the position of the lab is in that specific</p> <p>8 area.</p> <p>9 Q. So is it an accurate summary by me that</p> <p>10 you don't enjoy writing reviews but you think it's</p> <p>11 important that you do so?</p> <p>12 A. Well, it's important, at least from my</p> <p>13 point of view, it's important that the young people</p> <p>14 are able to write the review because it is important.</p> <p>15 Q. And do reviews ultimately factor into your</p> <p>16 H index?</p> <p>17 A. I'm sure it does.</p> <p>18 Q. Because a review would get cited?</p> <p>19 A. The review are cited -- the review -- my</p> <p>20 review that are most cited are some that I wrote</p> <p>21 myself.</p> <p>22 Q. And fair to say the H index is important</p> <p>23 to you?</p> <p>24 A. Not really.</p> <p>25 Q. Do you --</p>
<p style="text-align: right;">Page 46</p> <p>1 the most appropriate postdoc whether they would like</p> <p>2 to write the review. Okay? If they say yes and they</p> <p>3 are committed to do that, I write to the journal and</p> <p>4 say, "Yes, we will write this review." That's all.</p> <p>5 Q. Okay. And you may have said this and I</p> <p>6 just missed it, so what's the kind of determining</p> <p>7 factor as to whether you write it yourself versus ask</p> <p>8 a postdoc?</p> <p>9 A. Impact.</p> <p>10 Q. Impact. Okay. So it would depend on the</p> <p>11 journal?</p> <p>12 A. Yes.</p> <p>13 Q. I see. And you mentioned New England</p> <p>14 Journal of Medicine. That's a very impactful</p> <p>15 journal, right?</p> <p>16 A. Yes. Or one of the big, Nature Genetics,</p> <p>17 for example, it has a huge impact so I write it.</p> <p>18 Okay? For less -- since I hate to write review as I</p> <p>19 mentioned, I ask my -- since it would be good for</p> <p>20 them, I ask my postdocs if they would like to.</p> <p>21 Q. And typically in that case, if you ask a</p> <p>22 postdoc, you do it together, the review?</p> <p>23 A. No. In general, they write it. Okay?</p> <p>24 They know what the idea of the lab, what the lab is</p> <p>25 doing. Okay? And then I check whether the article</p>	<p style="text-align: right;">Page 48</p> <p>1 A. I mean, it is an indication of</p> <p>2 productivity. But, you know, I've been cited 220,000</p> <p>3 times, so impact is very important. Okay? But the</p> <p>4 most important thing, in my view, is the impact of</p> <p>5 discovery, why the discovery is important. We will</p> <p>6 be remembered for the impact of our discovery, not</p> <p>7 for that they made 3,000 paper, they make some paper</p> <p>8 which have really changed the field.</p> <p>9 Q. In your lab do you talk about the H index?</p> <p>10 A. We might. But, in general, when I review</p> <p>11 people, I always look at not only a discovery but</p> <p>12 also the H index because it's an index of impact. Is</p> <p>13 not a perfect index of the impact but it's something</p> <p>14 that you can measure. And, in general, people, at</p> <p>15 least as far as I know, people who have high impact,</p> <p>16 high H index, are people who have quite a bit of</p> <p>17 impact.</p> <p>18 Q. Okay. And so just so I understand what</p> <p>19 you just said, if you are reviewing another</p> <p>20 scientist, you check that scientist's H index?</p> <p>21 A. In general I do. Not done that much in</p> <p>22 United States, although is becoming. In Europe they</p> <p>23 do it all the time. For example, in Europe if you</p> <p>24 apply for a grant, the first thing you put down is</p> <p>25 what is your H index because that will give you an</p>




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<p>1 A. Yes.</p> <p>2 Q. Okay. Are there scientific norms other</p> <p>3 than what is set forth by ORI?</p> <p>4 A. Yeah. But we can see that it's --</p> <p>5 MR. ARNOLD: Objection. Scope.</p> <p>6 A. -- maybe a gold standard, what I -- a gold</p> <p>7 standard --</p> <p>8 Q. All right.</p> <p>9 A. -- that the federal government said was</p> <p>10 right.</p> <p>11 Q. But you've been a scientist a long time.</p> <p>12 There are -- are there scientific norms other than</p> <p>13 what ORI writes down?</p> <p>14 A. But that wouldn't count. Of course. You</p> <p>15 may have your own beliefs but we have to follow the</p> <p>16 rules, and there are some very precise rules as</p> <p>17 defined by ORI and by the National Institute of</p> <p>18 Health and by the U.S. government.</p> <p>19 Q. Now, Dr. Croce, the complaint starts on</p> <p>20 page 16, you don't need to read anything right now</p> <p>21 but there's a heading "USA TODAY Article." Do you</p> <p>22 see that?</p> <p>23 A. USA TODAY. Where is it?</p> <p>24 Q. Bottom of 16.</p> <p>25 A. Yes.</p>	<p>1 Do you, again I don't want to know about</p> <p>2 conversations with your lawyers, but do you have an</p> <p>3 understanding, why didn't you sue USA TODAY?</p> <p>4 A. Ask my lawyer.</p> <p>5 Q. You don't have an understanding?</p> <p>6 MR. ARNOLD: Well, if you have one</p> <p>7 independent of what your lawyers have told you, you</p> <p>8 can tell him.</p> <p>9 THE WITNESS: Huh?</p> <p>10 MR. ARNOLD: I said if you have an</p> <p>11 understanding independent of what your lawyers have</p> <p>12 told you, then you can answer the question.</p> <p>13 MR. NOLAN: Well, I think if he has an</p> <p>14 understanding that may or may not --</p> <p>15 MR. ARNOLD: No, he's not going to answer</p> <p>16 based -- you can't cloak a question by saying I want</p> <p>17 your understanding when the basis of the</p> <p>18 understanding is an attorney-client communication.</p> <p>19 MR. NOLAN: I don't think that --</p> <p>20 MR. ARNOLD: So if you have an --</p> <p>21 MR. NOLAN: I disagree.</p> <p>22 MR. ARNOLD: -- understanding outside of</p> <p>23 that, then you can tell him. If not, then you tell</p> <p>24 him that you cannot.</p> <p>25 MR. NOLAN: All right. Well, I will note</p>
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<p>1 Q. My question to you is: Do you recall an</p> <p>2 article in USA TODAY about you?</p> <p>3 A. I remember that there was. I don't recall</p> <p>4 that article now.</p> <p>5 Q. All right. Do you recall reading it?</p> <p>6 A. I must have read it.</p> <p>7 Q. Do you recall anybody telling you about</p> <p>8 it?</p> <p>9 A. For sure my lawyer mentioned it to me.</p> <p>10 Q. And do you, I think I know the answer but</p> <p>11 I'll ask you, do you have any firsthand knowledge of</p> <p>12 any communications Dr. Sanders would have had with</p> <p>13 USA TODAY reporters?</p> <p>14 A. No.</p> <p>15 Q. Is it an accurate statement that anything</p> <p>16 you know about what Dr. Sanders said or did not say</p> <p>17 to USA TODAY would come from your reading the USA</p> <p>18 TODAY article?</p> <p>19 A. Correct.</p> <p>20 Q. You haven't sued USA TODAY, have you?</p> <p>21 A. Excuse me?</p> <p>22 Q. You have not sued USA TODAY, have you?</p> <p>23 A. Not that I know. Maybe you can give me</p> <p>24 some good clue.</p> <p>25 Q. I'm on the wrong side for that.</p>	<p>1 on the record that I disagree with that instruction</p> <p>2 and, I mean, we don't have to -- I mean, we've stated</p> <p>3 what we think. I think if you have an understanding,</p> <p>4 you have an understanding. It's not an</p> <p>5 attorney-client communication.</p> <p>6 MR. ARNOLD: Yeah, but if the</p> <p>7 understanding is premised upon something your lawyer</p> <p>8 told you and that's the only basis upon which you can</p> <p>9 have the understanding, it's a backdoor way of saying</p> <p>10 "Tell me what your lawyer told you." He's not going</p> <p>11 to respond to those questions.</p> <p>12 MR. NOLAN: I don't think so.</p> <p>13 Q. (By Mr. Nolan) All right. Dr. Croce, do</p> <p>14 you feel that you were wronged by USA TODAY? Do you</p> <p>15 feel that you were wronged by USA TODAY?</p> <p>16 A. Of course.</p> <p>17 Q. You feel you were wronged by The New York</p> <p>18 Times?</p> <p>19 A. Yes, big time.</p> <p>20 Q. All right. Do you feel that one or the</p> <p>21 other wronged you more than the other?</p> <p>22 A. I mean, The New York Time, everybody in</p> <p>23 the world reads it. The USA TODAY, maybe some people</p> <p>24 in the bathroom on the airplane read it, or the other</p> <p>25 papers. New York Time is a big journal. At least in</p>

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<p>1 Q. Okay. And did that article --</p> <p>2 approximately, the best you can recall, when did the</p> <p>3 article in Nature run?</p> <p>4 A. A few years ago. Five, six years ago.</p> <p>5 Q. Five or six years ago.</p> <p>6 A. Maybe ten.</p> <p>7 Q. And did that article mention you by name?</p> <p>8 A. No. It was pre-New York Times.</p> <p>9 Q. All right.</p> <p>10 A. Oh, this Clare Francis was in business</p> <p>11 already.</p> <p>12 Q. Sure. But did the article in Nature</p> <p>13 mention your name?</p> <p>14 A. No. No. No.</p> <p>15 Q. Okay.</p> <p>16 A. I know a lot of people who have been</p> <p>17 denounced by Clare Francis.</p> <p>18 Q. I understand. No, I just want to</p> <p>19 understand --</p> <p>20 A. Always -- most of them are western blots</p> <p>21 and plagiarism.</p> <p>22 Q. So most of the concerns that Clare Francis</p> <p>23 has raised concerned western --</p> <p>24 A. Concerned western blot.</p> <p>25 Q. Let me finish.</p>	<p>1 Q. And Clare Francis communicated to Ohio</p> <p>2 State about you?</p> <p>3 A. I'm sure they did.</p> <p>4 MR. ARNOLD: Well, do you know? Do you</p> <p>5 know?</p> <p>6 THE WITNESS: I know for sure in certain</p> <p>7 cases, yes.</p> <p>8 MR. ARNOLD: All right.</p> <p>9 Q. All right. Tell me what you recall about</p> <p>10 how Ohio State dealt with concerns raised about you</p> <p>11 by Clare Francis.</p> <p>12 A. They do an investigation. Every time they</p> <p>13 got the denunciation they made an investigation.</p> <p>14 Q. And you would have to respond?</p> <p>15 A. Of course. Yes.</p> <p>16 Q. Okay. Did you get legal counsel for that</p> <p>17 one?</p> <p>18 A. No.</p> <p>19 Q. And how did Ohio State resolve its</p> <p>20 investigations?</p> <p>21 A. The one that were resolved, they look into</p> <p>22 it and say that they look at everything that was</p> <p>23 mentioned and it was fine, and I did not have any</p> <p>24 responsibility for that.</p> <p>25 Q. Ohio State didn't have you do anything</p>
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<p>1 -- western blots and plagiarism, correct?</p> <p>2 A. Uh-huh.</p> <p>3 Q. Is that a yes?</p> <p>4 A. That is correct.</p> <p>5 Q. Okay.</p> <p>6 A. At least if I remember well the article in</p> <p>7 Nature.</p> <p>8 Q. Right. Okay.</p> <p>9 So what, as far as anything you know</p> <p>10 about, how did Clare Francis express concerns about</p> <p>11 you?</p> <p>12 A. How do I know? I know only from what the</p> <p>13 university tells me, you know. Clare Francis made</p> <p>14 the denunciation either to the university or to the</p> <p>15 journal or to both and then they come to me.</p> <p>16 Q. Let's talk about the journal first. Are</p> <p>17 you talking about Nature or something else?</p> <p>18 A. No. No. Many different journal.</p> <p>19 Q. Clare Francis, as far as --</p> <p>20 A. Clare Francis logged in a lot of journal.</p> <p>21 Q. All right.</p> <p>22 A. Including PNAS.</p> <p>23 Q. So Clare Francis expressed concerns about</p> <p>24 you to multiple journals. True?</p> <p>25 A. Of course. Yes.</p>	<p>1 differently in response to those concerns?</p> <p>2 A. Only in two cases of two postdoctors of</p> <p>3 mine, one was Garofalo and the other one Pichiorri,</p> <p>4 that said in their investigation they found some</p> <p>5 degree of sloppiness in the work of these two ladies.</p> <p>6 We had to make sure that that sloppiness would not</p> <p>7 happen again.</p> <p>8 Q. And what did you -- well, first of all,</p> <p>9 who did you say? Garofalo and Pichiorri?</p> <p>10 A. Yes. Correct.</p> <p>11 Q. Do either of those still work in your lab?</p> <p>12 A. No. No. They are gone.</p> <p>13 Q. Did you tell them to leave?</p> <p>14 A. No.</p> <p>15 Q. Okay. They left as a natural --</p> <p>16 A. One got a very good job in Manchester,</p> <p>17 that's Garofalo, and the other one got a job at City</p> <p>18 of Hope in California.</p> <p>19 Q. So you said Ohio State concluded there was</p> <p>20 sloppiness?</p> <p>21 A. Yes, some degree of sloppiness and we had</p> <p>22 to fix it.</p> <p>23 Q. Did you agree there was some degree of</p> <p>24 sloppiness?</p> <p>25 A. Oh, yes, I agree with them.</p>

<p style="text-align: right;">Page 189</p> <p>1 Q. So, Dr. Croce, would you -- how would you</p> <p>2 characterize concerns raised by Dr. Sanders in the</p> <p>3 categories you just talked about, discover some</p> <p>4 mistakes, mostly wrong? All wrong? None wrong? Do</p> <p>5 you have a -- can you characterize those?</p> <p>6 A. Yeah. In my small experience --</p> <p>7 Q. Yes.</p> <p>8 A. -- in the case of the thing I know is by</p> <p>9 Sanders, I know that some allegation are wrong and</p> <p>10 some allegation brought to the discovery of some</p> <p>11 mistakes.</p> <p>12 Q. Do you, and I know there are a lot of</p> <p>13 articles and a lot of documents, but just sitting</p> <p>14 here talking can you recall a specific allegation or</p> <p>15 concern raised by Dr. Sanders that you think is</p> <p>16 wrong?</p> <p>17 A. I think there are several allegation. I</p> <p>18 will have to look at the thing, but there were</p> <p>19 several, uh-huh.</p> <p>20 Q. And is it possible that with respect to</p> <p>21 some concerns, that you and Dr. Sanders would have</p> <p>22 different opinions as to whether it was right or</p> <p>23 wrong?</p> <p>24 A. That is always possible to have a</p> <p>25 difference of opinion.</p>	<p style="text-align: right;">Page 191</p> <p>1 A. In all sciences.</p> <p>2 Q. In all sciences. Okay.</p> <p>3 A. Some are decrepit. A few are young.</p> <p>4 Q. All right. So PNAS, and forgive me if you</p> <p>5 already said this one, PNAS's index?</p> <p>6 A. Ten. Around ten.</p> <p>7 Q. Okay.</p> <p>8 A. But it's a good journal. The problem is</p> <p>9 they tend to publish too many article.</p> <p>10 Q. Oh, so maybe not selective enough as far</p> <p>11 as the articles.</p> <p>12 A. Yeah. But you always find something very</p> <p>13 good.</p> <p>14 Q. And you've published in that journal, I</p> <p>15 trust?</p> <p>16 A. Yeah. I publish a lot of paper in PNAS.</p> <p>17 Q. Okay. I sort of grouped a handful of</p> <p>18 things related to PNAS which I don't think they all</p> <p>19 relate to the same thing, but --</p> <p>20 MR. ARNOLD: Are we on 20 here?</p> <p>21 Q. -- I'd just like to sort of run through</p> <p>22 them with you.</p> <p>23 A. Okay.</p> <p>24 Q. All right. Dr. Croce, do you recognize</p> <p>25 Defendant's Exhibit 20?</p>
<p style="text-align: right;">Page 190</p> <p>1 Q. Doing okay?</p> <p>2 A. Yeah.</p> <p>3 Q. All right. Dr. Croce, I don't remember if</p> <p>4 we've talked about PNAS specifically. That's a</p> <p>5 journal, right?</p> <p>6 A. Yes.</p> <p>7 Q. What does "PNAS" stand for?</p> <p>8 A. Proceedings of the National Academy of</p> <p>9 Sciences of the United States of America.</p> <p>10 Q. All right. And, if I recall from your</p> <p>11 complaint, you are a member of the National Academy</p> <p>12 of Sciences?</p> <p>13 A. I am.</p> <p>14 Q. And have been for quite some time?</p> <p>15 A. Since in the middle '90s.</p> <p>16 Q. And that's pretty selective?</p> <p>17 A. Yes. But not selective enough.</p> <p>18 Q. Everybody who's already in says that.</p> <p>19 (Laughter.)</p> <p>20 A. That's true.</p> <p>21 Q. All right. If you know, approximately how</p> <p>22 many scientists are in the National Academy of</p> <p>23 Sciences?</p> <p>24 A. About 2,000.</p> <p>25 Q. About 2,000?</p>	<p style="text-align: right;">Page 192</p> <p>1 A. Yes, I do.</p> <p>2 Q. What is it?</p> <p>3 A. It's a letter from Muller Fabbri to me</p> <p>4 concerning a paper in PNAS.</p> <p>5 Q. First of all, who is Dr. Fabbri?</p> <p>6 A. A former postdoc of mine who is now, he</p> <p>7 went to University of Southern California and just a</p> <p>8 year ago went to University of Hawaii.</p> <p>9 Q. Just looking at his email address here at</p> <p>10 the time of Exhibit 20 it looks like he was at the</p> <p>11 University of Southern California?</p> <p>12 A. Correct.</p> <p>13 Q. All right. And summarize what this</p> <p>14 situation is, please.</p> <p>15 A. This is a long story concerning a paper in</p> <p>16 PNAS. The blot -- the Dimitrios deal, he was the</p> <p>17 second author of that paper on western blot.</p> <p>18 Q. What was the issue?</p> <p>19 A. It was against the western, whether a band</p> <p>20 was derived from another band or was the original</p> <p>21 band.</p> <p>22 Q. Okay.</p> <p>23 A. And we could not find the original, the</p> <p>24 authority of this. So, again, one of those loading</p> <p>25 band, they all look alike.</p>

Carlo M. Croce, MD

<p style="text-align: right;">Page 217</p> <p>1 Q. It could be honest error that they were 2 duplicated. 3 A. Yes. 4 Q. Okay. 5 A. So in order to be sure, you have to have 6 the raw data. Raw data, you are sure. 7 Q. All right. But without the raw data you 8 can't -- 9 A. You are not sure. 10 Q. Dr. Croce, I'm going to hand you what I'm 11 marking as Defendant's Exhibit 25, ask you to take a 12 look. I'm not going to ask you to read the entire 13 thing, translate the entire thing, I'll just give you 14 that assurance first. 15 A. I did not read this before so I had to 16 laugh. 17 Q. You've never seen it before? 18 A. I don't believe so. 19 Q. All right. 20 A. You know why I laugh? 21 Q. Why do you laugh? 22 A. That is a championship of the 3,000 23 Italian scientists, the stars of the research. 24 Q. All right. 25 A. And who is the number one?</p>	<p style="text-align: right;">Page 219</p> <p>1 AFFIDAVIT 2 State of Ohio ) 3 ) SS: 4 County of _____ ) 5 I, CARLO M. CROCE, MD, do hereby certify that 6 I have read the foregoing transcript of my deposition 7 given on Wednesday, March 27, 2019; that together 8 with the correction page attached hereto noting 9 changes in form or substance, if any, it is true and 10 correct. 11 12 CARLO M. CROCE, MD 13 14 I do hereby certify that the foregoing 15 transcript of the deposition of CARLO M. CROCE, MD 16 was submitted to the witness for reading and signing; 17 that after he had stated to the undersigned Notary 18 Public that he had read and examined his deposition, 19 he signed the same in my presence on the _____ day 20 of _____, 2019. 21 22 Notary Public 23 24 My commission expires _____, _____. 25 -- --</p>
<p style="text-align: right;">Page 218</p> <p>1 Q. You. 2 A. Yeah. 3 Q. All right. 4 A. So I was having a laugh. 5 Q. It appears to me -- you read Italian, I 6 don't -- look at the first page, does it appear to 7 you this was published on December 7, 2018? 8 A. December 7, 2018, in Apulia, University of 9 Bari, Italy. 10 Q. All right. Do you remember being 11 interviewed for this article at all? 12 A. For sure not. 13 Q. Okay. 14 A. I don't remember. 15 MR. NOLAN: All right. I don't think I 16 have anything else. Appreciate your time today. 17 THE WITNESS: Thank you very much for your 18 time. It's been a very pleasant experience. 19 MR. ARNOLD: He'll read. 20 (Whereupon, at 3:59 p.m., the deposition 21 was concluded and signature was not waived.) 22 -- -- 23 24 25</p>	<p style="text-align: right;">Page 220</p> <p>1 CERTIFICATE 2 State of Ohio ) 3 ) SS: 4 County of Franklin ) 5 I, Maria DiPaolo Jones, RDR and CRR, the 6 undersigned, a duly qualified and commissioned notary 7 public within and for the State of Ohio, do certify 8 that, before giving his deposition, CARLO M. CROCE, 9 MD was by me first duly sworn to testify to the 10 truth, the whole truth, and nothing but the truth; 11 that the foregoing is the deposition given at said 12 time and place by CARLO M. CROCE, MD; that I am 13 neither a relative of nor employee of any of the 14 parties or their counsel and have no interest 15 whatever in the result of the action. 16 IN WITNESS WHEREOF, I hereunto set my hand and 17 official seal of office on this 5th day of April, 18 2019. 19 20  21 Maria DiPaolo Jones 22 and Notary Public in and for the 23 State of Ohio. 24 My commission expires: June 19, 2021. 25 (2799-MDJ) -- --</p>

55 (Pages 217 to 220)